

Appln. S.N. 10/688,428
Amdt. dated July 7, 2006
Reply to Office Action of March 13, 2006
Docket No. 200313759-1

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REMARKS

The Office Action of March 13, 2006 has been received and carefully reviewed. It is submitted that, by this Amendment, all bases of rejection and objection are traversed and overcome. Upon entry of this Amendment, claims 1-3, 5-12, 14-21 and 23-27 remain in the application. Claims 4, 13 and 22 have been canceled herein. New claims 28 and 29 have been added in order to set forth additional specific embodiments of Applicants' invention. Reconsideration of the claims is respectfully requested.

Claims 7, 9 and 11 stand objected to because each claim contains a typographic error. Claim 7 recites "claim6", claim 9 recites "claim8", and claim 11 recites "claim10".

Applicants have amended claims 7, 9 and 11 to recite "claim 6", "claim 8" and "claim 10" respectively. As such, Applicants respectfully submit that the objection to claims 7, 9 and 11 is obviated in light of the amendments thereto.

Claims 1-9 stand rejected under 35 U.S.C 103(a) as being obvious over Looman (U.S. Patent No. 5,679,143). The Examiner states that Looman discloses an inkjet marking fluid including a buffering agent (e.g., an amino acid) having first and second functional groups with pKa equal to or less than that of the pH sensitive colorant. The Examiner admits that Looman does not disclose that the first functional group has a pKa at most 1 unit away from the marking or fixer fluid pH, nor that the second functional group has a pKa at least two units away from the marking or fixer fluid pH. The Examiner concludes, however, that it would have been obvious to one skilled in the art to incorporate the recited functional groups, since it has been held that it is not inventive to discover optimum values or workable ranges by routine experimentation.

Although Applicants do not acquiesce to the Examiner's rejections, in order to expedite prosecution, Applicants have amended claim 1 to recite that the marking or fixing fluid "consists essentially of" the amino acid buffering agent. Support for this

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recitation may be found throughout the specification as filed, at least at page 1, lines 14-18, page 2, lines 10-16 and lines 24-26, and page 3, lines 9-18. Support for the recitation of a vehicle may also be found throughout the specification as filed, at least in the Examples, for example, at page 6, lines 4 et seq.

Applicants respectfully disagree that such a buffering agent, without the addition of additional non-amino organic acids, is obvious in view of the teachings of Looman. Looman specifically states that the pH adjusting agent (examples of which include the amino acids) is added to another organic acid (described at Col. 6, lines 17-29 as "in contrast to the pH adjusting organic component . . . the organic acid component will have no basic functional groups") to increase the acid functional group in the ink and to increase the pH of the ink to a desired level (see Col. 5, lines 57-63, and Col. 6, lines 38-42).

Furthermore, Looman teaches that the non-amino organic acid "should be present in the target ink-jet composition at a concentration ranging from about 0.1 to 20 wt.%" (see Col. 6, lines 4-12). Looman goes on to state that, "an organic acid (*referring to the non-amino organic acid*) concentration of less than about 0.1 wt.% would be insufficient to effectively reduce the pH differential" *comments and emphasis added* (see Col. 6, lines 6-8). As such, Looman neither teaches nor suggests a composition without the non-amino organic acid.

Applicants respectfully submit that it would not be obvious, in view of the teachings of Looman, to replace the non-amino organic acids (which do not include a basic functional group) with an amino acid (which includes at least one basic functional group).

For all the reasons stated above, it is submitted that Applicants' invention as defined in claims 1-9 is not anticipated, taught or rendered obvious by the cited reference, either alone or in combination, and patentably defines over the art of record.

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Claims 10-27 stand rejected under 35 U.S.C 103(a) as being obvious over Looman. The Examiner states that Looman discloses an inkjet recording system including a buffering agent (e.g., an amino acid) having first and second functional groups with pKa equal to or less than that of the pH sensitive colorant. The Examiner admits that Looman does not disclose that the first functional group has a pKa at most 1 unit away from the marking or fixer fluid pH, nor that the second functional group has a pKa at least two units away from the marking or fixer fluid pH. The Examiner concludes, however, that it would have been obvious to one skilled in the art to incorporate the recited functional groups, since it has been held that it is not inventive to discover optimum values or workable ranges by routine experimentation.

Applicants reiterate the above arguments regarding Looman. Applicants respectfully submit that Looman neither teaches nor suggests the removal of the non-amino organic acid from his target ink composition. For all the reasons stated above, it is submitted that Applicants' invention as defined in claims 10-27 is not anticipated, taught or rendered obvious by the cited reference, either alone or in combination, and patentably defines over the art of record.

Claims 1-3 and 6-9 stand rejected under 35 U.S.C 103(a) as being obvious over Adamic et al. (U.S. Patent No. 5,785,743). The Examiner states that Adamic discloses an inkjet marking fluid including a buffering agent having first and second functional groups with pKa equal to or less than that of the pH sensitive colorant. The Examiner admits that Adamic does not disclose that the first functional group has a pKa at most 1 unit away from the marking or fixer fluid pH, nor that the second functional group has a pKa at least two units away from the marking or fixer fluid pH. The Examiner concludes, however, that it would have been obvious to one skilled in the art to incorporate the recited functional groups, since it has been held that it is not inventive to discover optimum values or workable ranges by routine experimentation.

Applicants respectfully submit that Adamic neither teaches nor suggests a fluid having an amino acid buffering agent as recited in Applicants' claim 1. In fact, all of

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the organic acids taught in Adamic are non-amino organic acids. One skilled in the art would not be led to replace the organic acids of Adamic (which have no basic functional group(s)) with the amino acids of Applicants' claims (which include basic functional group(s)). For all the reasons stated above, it is submitted that Applicants' invention as defined in claims 1-3 and 6-9 is not anticipated, taught or rendered obvious by the cited reference, either alone or in combination, and patentably defines over the art of record.

Claims 10-12, 15-21 and 24-27 stand rejected under 35 U.S.C 103(a) as being obvious over Adamic et al. The Examiner states that Adamic discloses an inkjet recording system including a buffering agent having first and second functional groups with pKa equal to or less than that of the pH sensitive colorant. The Examiner admits that Adamic does not disclose that the first functional group has a pKa at most 1 unit away from the marking or fixer fluid pH, nor that the second functional group has a pKa at least two units away from the marking or fixer fluid pH. The Examiner concludes, however, that it would have been obvious to one skilled in the art to incorporate the recited functional groups, since it has been held that it is not inventive to discover optimum values or workable ranges by routine experimentation.

Applicants reiterate the above arguments regarding Adamic. Applicants respectfully submit that Adamic neither teaches nor suggests a composition consisting essentially of an amino acid buffering agent. For all the reasons stated above, it is submitted that Applicants' invention as defined in claims 10-12, 15-21 and 24-27 is not anticipated, taught or rendered obvious by the cited reference, either alone or in combination, and patentably defines over the art of record.

Claims 28 and 29 have been added to set forth additional specific embodiments of Applicants' invention. Claim 28 recites that the marking or fixing fluid does not include an organic acid having no basic functional groups; and claim 29 recites that the organic acid having no basic functional groups is selected from succinic acid, acetic acid, and glutaric acid. Support for these recitations may be

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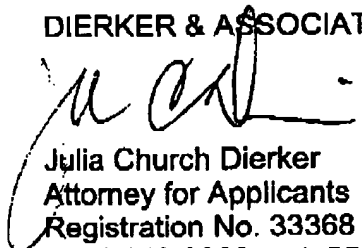
found throughout the specification as filed, at least at page 3, lines 10-16 and page 5, lines 8-13. Applicants respectfully submit that new claims 28 and 29 are in sharp contrast to the teachings of Looman (at Col. 6, lines 12-24 and Col. 7, lines 26-29) and Adamic (at Col. 5, lines 7-21), the target inks of which include organic acids that do not include a basic functional group.

In summary, claims 1-3, 5-12, 14-21 and 23-27 remain in the application. New claims 28 and 29 have been added. It is submitted that, through this amendment, Applicants' invention as set forth in these claims is now in a condition suitable for allowance.

Further and favorable consideration is requested. If the Examiner believes it would expedite prosecution of the above-identified application, the Examiner is cordially invited to contact Applicants' Attorney at the below-listed telephone number.

Respectfully submitted,

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